

Reference = ABLIKIM 15C; PRL 114 092003
Verifier code = BES3

PLEASE READ NOW



Normally we send all verifications for one experiment to one person, usually the spokesperson or data-analysis coordinator, who then distributes them to the appropriate people. Please tell us if we should send the verifications for your experiment to someone else.

Xiao-Rui Lyu

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July 21, 2016

Dear Colleague,

- (1) Please check the results of your experiment carefully. They are marked.
- (2) Please reply within one week.
- (3) Please reply even if everything is correct.
- (4) IMPORTANT!! Please tell WHICH papers you are verifying. We have lots of requests out.
- (5) Feel free to make comments on our treatment of any of the results (not just yours) you see.

Thank you for helping us make the Review accurate and useful.

Sincerely,

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Russian Federation

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c \bar{c} MESONS

X(4230)

$$I^G(J^{PC}) = ?^?(1^{--})$$

NODE=MXXX025

NODE=M222

OMITTED FROM SUMMARY TABLE

Enhancement reported by ABLIKIM 15C in $e^+e^- \rightarrow \omega\chi_{c0}$ at $\sqrt{s} = 4.23\text{--}4.26$ GeV at 9σ significance. Lineshape found to be inconsistent with origination from X(4260). NEEDS CONFIRMATION.

NODE=M222

X(4230) MASS

NODE=M222M

	VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
YOUR DATA	4230±8±6	180	¹ ABLIKIM	15C BES3	$e^+e^- \rightarrow \omega\chi_{c0}$

NODE=M222M

YOUR NOTE ¹ From a 3-parameter fit of measured cross sections from $\sqrt{s} = 4.21\text{--}4.42$ GeV to a phase-space modified Breit-Wigner function, using the decays $\chi_{c0} \rightarrow \pi^+\pi^-$, $\chi_{c0} \rightarrow K^+K^-$, and $\omega \rightarrow \pi^+\pi^-\pi^0$.

NODE=M222M;LINKAGE=A

X(4230) WIDTH

NODE=M222W

	VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
YOUR DATA	38±12±2	180	¹ ABLIKIM	15C BES3	$e^+e^- \rightarrow \omega\chi_{c0}$

NODE=M222W

YOUR NOTE ¹ From a 3-parameter fit of measured cross sections from $\sqrt{s} = 4.21\text{--}4.42$ GeV to a phase-space modified Breit-Wigner function, using the decays $\chi_{c0} \rightarrow \pi^+\pi^-$, $\chi_{c0} \rightarrow K^+K^-$, and $\omega \rightarrow \pi^+\pi^-\pi^0$.

NODE=M222W;LINKAGE=A

X(4230) $\Gamma(i)\Gamma(e^+e^-)/\Gamma(\text{total})$

NODE=M222220

	VALUE (eV)	EVTS	DOCUMENT ID	TECN	COMMENT	$\Gamma_2\Gamma_1/\Gamma$
YOUR DATA	2.7±0.5±0.4	180	¹ ABLIKIM	15C BES3	$e^+e^- \rightarrow \omega\chi_{c0}$	

NODE=M222G01
NODE=M222G01

YOUR NOTE ¹ From a 3-parameter fit of measured cross sections from $\sqrt{s} = 4.21\text{--}4.42$ GeV to a phase-space modified Breit-Wigner function, using the decays $\chi_{c0} \rightarrow \pi^+\pi^-$, $\chi_{c0} \rightarrow K^+K^-$, and $\omega \rightarrow \pi^+\pi^-\pi^0$.

NODE=M222G01;LINKAGE=A

X(4230) BRANCHING RATIOS

NODE=M222225

	VALUE	EVTS	DOCUMENT ID	TECN	COMMENT	Γ_2/Γ
YOUR DATA	seen	180	¹ ABLIKIM	15C BES3	$e^+e^- \rightarrow \omega\chi_{c0}$	

NODE=M222R01
NODE=M222R01

YOUR NOTE ¹ From a 3-parameter fit of measured cross sections from $\sqrt{s} = 4.21\text{--}4.42$ GeV to a phase-space modified Breit-Wigner function, using the decays $\chi_{c0} \rightarrow \pi^+\pi^-$, $\chi_{c0} \rightarrow K^+K^-$, and $\omega \rightarrow \pi^+\pi^-\pi^0$.

NODE=M222R01;LINKAGE=A

X(4230) REFERENCES

NODE=M222

YOUR PAPER ABLIKIM 15C PRL 114 092003 M. Ablikim *et al.* (BES III Collab.)

REFID=56401